



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 09/873,103 | 05/31/2001 | Graham V. Poor | 02054.0003U1 | 1649 |
| 30554 | 7590 | 10/07/2004 | EXAMINER | |
| SHEMWELL GREGORY & COURTNEY LLP 4880 STEVENS CREEK BOULEVARD SUITE 201 SAN JOSE, CA 95129 | | | CONTEE, JOY KIMBERLY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2686 | 8 |

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/873,103

Applicant(s)

POOR ET AL.

Examiner

Joy K Contee

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new grounds of rejection.

Claim Objections

2. Claim 1 is objected to because of the following informalities: in the preamble, "method for" in the preamble appears to be a typographical error (i.e., redundant), since the "a method for" is already stated. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bose et al. (Bose), U.S. Patent No. 6,654,428, in view of Hardin et al. (Hardin), U.S. Patent Application Publication No. US 2002/0099753.
5. Regarding claim 1, Bose discloses a method for managing application programs in a digital electronic device, the method (and an electronic device comprising a

Art Unit: 2686

memory in which is storable an object, the object framework comprising and application set) comprising the steps of:

creating a plurality of bus listener objects in an object framework of the device (and a processing system programmed to effect a method using the object framework); defining a plurality of bus addresses, each corresponding to one and only one of the plurality of bus listener objects (i.e., reads on virtual memory address and physical memory address); receiving a value from a process; writing the value in a bus address (i.e., reads on swapping of buffers and affecting a transfer into application data space by altering the page table within the virtual memory system) (col. 9, lines 1-28 and lines 36-61);

a bus listener object to which the bus address corresponds responding to a change in value stored in the bus address by invoking an object method associated with the address, wherein a plurality of relationships between the plurality of bus listener objects, the plurality of bus addresses, and a plurality of object methods is defined by the control file (i.e., reads on interface card acting as a PCI bus master which initiates transfers on the PCI bust and controls swapping of buffers and affecting a transfer into application data space by altering the page table within the virtual memory system) (col. 9, lines 36-61 and col. 13, lines 45-67).

Bose fails to explicitly disclose storing, on the electronic device, an application set and an associated control file, *wherein the control file integrates a plurality of applications in the application set such that more than one application can execute on the electronic device concurrently, and transparently to a user of the electronic device.*

Art Unit: 2686

In a similar field of endeavor, Hardin discloses storing, on the electronic device, an application set and an associated control file, wherein the control file integrates a plurality of applications in the application set such that more than one application can execute on the electronic device concurrently, and transparently to a user of the electronic device, ***see page 1 [0014] and page 3 [0031].***

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Bose to include wherein the control file integrates a plurality of applications in the application set such that more than one application can execute on the electronic device concurrently, and transparently to a user of the electronic device.

Motivation for doing so is suggested in Bose wherein the interface card operates in cooperation with the operation system, wherein a Unix operating system provides a multitasking operation system that includes a virtual memory system for controlling memory resources (col. 7, lines 31-37).

Regarding claim 2, Bose discloses the method claimed in claim 1, wherein the step of receiving a value (i.e., swapping data) comprises wirelessly receiving an activation signal from a remote source, the activation signal inherently including a representation of a value (col. 15, lines 21-29).

Regarding claim 3, Bose discloses the method claimed in claim 1, wherein the step of receiving a value from a process comprises receiving a value from an application program method in the device (col. 15, lines 30-43 and lines 46-67).

Art Unit: 2686

Regarding claim 4, Bose discloses the method claimed in claim 1, wherein the step of receiving a value from a process comprises receiving a value from a framework method in the device (col. 15, lines 10-43).

Regarding claim 5, Bose further discloses the method claimed in claim 1, wherein the step of creating a plurality of bus listener objects is performed in response to a control file specifying the bus address and corresponding method associated with the bus address of each bus listener (col. 7, lines 1-5 and lines 31-46 and col. 8, lines 36-64).

Regarding claim 6, Bose discloses the method claimed in claim 1, wherein the object framework is inherently a software layer between an application program layer and a platform layer (col. 13, lines 45-67).

Regarding claim 7, Bose discloses the method claimed in claim 6, wherein the object method is of an application program (col. 10, lines 22-30).

Regarding claim 8, Bose discloses the method claimed in claim 6, wherein the object method is of the framework (col. 13, lines 45-67).

Regarding claim 9, Bose discloses the method claimed in claim 8, wherein the object method runs an application program (col. 3, lines 47-54).

Regarding claim 10, Bose discloses the method claimed in claim 8, wherein the object method installs (i.e., reads on upon initialization) an application program (col. 9, lines 35-47).

Art Unit: 2686

Regarding claim 11, Bose discloses the method claimed in claim 8, wherein the object method monitors (i.e., reads on maintaining a queue of buffers) application program usage (col. 9, lines 47-54).

Regarding claim 12, Bose discloses the method claimed in claim 8, wherein the object method enables an application program (col. 7, lines 31-46).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Berry et al., U.S. Patent No. 6,658,654, discloses a method and system for low-overhead measurement of per thread performance information in a multithreaded environment.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2686

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

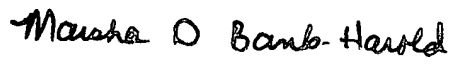
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on M (alternating), T & Th, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Joy Contee

October 3, 2004


MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600